

Name \_\_\_\_\_ Date \_\_\_\_\_

## 2.2A SIMPLIFYING RADICAL EXPRESSIONS

Simplify each radical expression

1. $\sqrt{44} =$
2. $\sqrt[3]{54} =$
3. $\sqrt{63a^{11}} =$
4. $\sqrt[3]{72a^{19}} =$
5. $\sqrt{75a^9} =$
6. $\sqrt[3]{125a^{13}} =$
7. $\sqrt{48a^{19}b^{10}} =$
8. $\sqrt[3]{-216a^{23}b^{15}} =$
9. $\sqrt{72a^{17}b^5c^{12}} =$
10. $\sqrt[3]{64a^{11}b^9c^{17}} =$
11. $\sqrt{28a^{14}b^9c^{18}} =$
12. $\sqrt[3]{40a^{15}b^6c^{19}} =$
13. $\sqrt{\frac{121}{36}} =$
14. $\sqrt{\frac{108a^{13}}{6a^7}} =$
15. $\sqrt{\frac{60a^{12}b^9}{5a^7b^3}} =$
16. $\sqrt{\frac{64a^{17}b^{11}}{8a^9b^8}} =$
17. $\sqrt{\frac{168a^{19}b^{15}}{7a^{13}b^{12}}} =$
18. $\sqrt{\frac{243a^{11}b^{17}}{9a^6b^{13}}} =$